

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 (currently amended): A wound dressing comprising a hydrogel composition, said hydrogel composition comprising a first portion which comprises a flexible plasticized hydrophilic polymer matrix having an internal cellular structure, and a second portion which comprises a flexible plasticized hydrophilic polymer matrix having a relatively continuous internal structure, wherein the first portion and second portion are of the same material and integrally formed in a single polymerization step, and wherein said second portion of the hydrogel composition includes apertures providing fluid flow communication through the said second portion between an external surface of the said second portion and the first portion whereby the first portion of the hydrogel composition can take up external water or other fluid into the cellular structure through the apertures of the said second portion.

Claim 2 (original): A wound dressing according to claim 1, wherein the first portion of said hydrogel composition comprises a porous foam having an internal cellular structure such that the volume ratio of cell void to matrix is greater than about 1:3 and the second portion comprises a relatively non-porous matrix.

Claim 3 (previously presented): A wound dressing according to claim 1, wherein the apertures of the second portion of the hydrogel composition continue into the first portion of the composition to invade it, without penetrating it entirely.

Claim 4 (currently amended): A wound dressing according to claim 1, wherein one or both of the said portions of the hydrogel composition is [adhesive] adhered to the skin.

Claim 5 (currently amended): A wound dressing according to claim 1, wherein the outward-facing external surface of the said second portion of the hydrogel composition defines a wound contacting surface of the dressing.

Claim 6 (previously presented): A wound dressing according to claim 1, wherein the absorption capacity of the hydrogel composition is between about 30% and about 10000%.

Claim 7 (previously presented): A wound dressing according to claim 1, wherein the water uptake rate of the first portion of the hydrogel composition is at least about 2 μ l/s as measured by the test method described herein.

Claim 8 (currently amended): A wound dressing according to claim 1 ~~when in sheet form,~~ in the form of a sheet, wherein the sheet having has a substantially uniform thickness of between about 0.5 to about 10 mm.

Claim 9 (previously presented): A wound dressing according to claim 1, wherein the dressing further comprises a backing layer over the hydrogel composition.

Claim 10 (original): A wound dressing according to claim 9, wherein the backing layer is substantially liquid-impermeable.

Claim 11 (currently amended): A wound dressing according to claim 10, further comprising a layer of adhesive on the surface of the backing layer facing the hydrogel composition layer.

Claim 12 (currently amended): A wound dressing according to claim 11, wherein the backing layer extends beyond at least one edge of the layer of hydrogel composition material to provide an adhesive-coated margin adjacent to said edge for adhering the dressing to a surface.

Claim 13 (previously presented): A wound dressing according to claim 1, further comprising an absorbent layer for receiving fluid transmitted through said hydrogel composition.

Claim 14 (original): A wound dressing according to claim 13, wherein the absorbent layer comprises a further layer of hydrophilic foam.

Claim 15 (previously presented): A wound dressing according to claim 12, further comprising at least one removable cover sheet to cover the wound facing surface of the hydrogel composition before use.

Claim 16 (currently amended): A wound dressing according to claim 15, wherein the releasable removable cover sheet provided with projections which extend into the apertures in the hydrogel composition sheet.

Claim 17 (original): A wound dressing according to claim 16, wherein the projections extend only part way into the hydrogel sheet.

Claim 18 (previously presented): A wound dressing according to claim 15, which is sterile and packaged in a microorganism-impermeable container.

Claim 19 (currently amended): A wound dressing according to claim 1, wherein the hydrogel composition has been obtained by a process which comprises polymerising a polymerisable mixture comprising a hydrophilic monomer ~~and optionally one or more comonomer~~, where the polymerisable mixture prior to polymerization comprises a first portion including a relatively high concentration of introduced gas bubbles and a second portion including a relatively low concentration of gas bubbles.

Claim 20 (currently amended): A method for dressing a wound or a burn, comprising the step of covering the wound or burn with a dressing comprising a hydrogel composition comprising a first portion which comprises a flexible plasticised hydrophilic polymer matrix having an internal cellular structure, and a second portion which comprises a flexible plasticized hydrophilic polymer matrix having relatively continuous internal structure, wherein the first portion and second portion are of the same material and integrally formed in a single polymerization step, and wherein the said second portion of the hydrogel composition includes apertures providing fluid flow communication through the said second portion between an external surface of the said second portion and the first portion whereby the first portion of the hydrogel composition can take up external water or other fluid into the cellular structure through the apertures of the said second portion.